WALLS, ATTORNEY GENERAL OF THE STATE OF WYOMING, ET AL. *v.* MIDLAND CARBON COMPANY ET AL.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF WYOMING.

No. 219. Argued October 13, 1920.—Decided December 13, 1920.

1. As applied to the facts of this case, the statute of Wyoming which prohibits, as wasteful, the burning and consumption of natural gas for its products without fully and actually applying and utilizing its heat for other manufacturing or domestic purposes, and which forbids owners or lessees of gas wells to sell or dispose of such gas for the manufacture of carbon or other resultant products in the making of which its heat is not so utilized for other manufacturing or domestic purposes, and which limits the prohibition to cases where the gas wells or sources of supply are within ten miles of any incorporated town or industrial plant, and penalizes infractions as misdemeanors,—is a legitimate exercise of the police power, and is not constitutionally objectionable as taking property without due process or as an unreasonable or arbitrary discrimination. Pp. 313 *et seq.*
2. So *held*, where it was objected that enforcement of the statute would destroy a heavy investment in a plant for the manufacture of carbon black, a substance of great utility, the value of which, with that of the gasoline also produced in the process, was claimed to exceed any other value obtainable from a like quantity of gas, and the manufacture of which, it was claimed, would be impracticable if the heat from the gas must be utilized as the statute prescribed. *Id.*
3. The statute seeks merely to prevent the selection of products the

production of which will tend to the rapid exhaustion of the gas supply; and it is not to be construed as demanding that the heat be utilized further than natural laws and existing instrumentalities allow. P. 325.

4. Owing to the fact that natural gas has no fixed *situs* in the earth but moves from place to place, possession of land is not possession of the gas within it, and the landowner does not gain an absolute property in the gas until he has captured it. P. 316.
5. From this also it results that a State may interpose its police power to prevent a waste or disproportionate use of the gas by a particular landowner in order to protect the equal right of other owners and to conserve the gas as a resource of the State. Pp. 316–319, 323. *Ohio Oil Co.* v. *Indiana*, 177 U. S. 190.
6. In confining its application to cases where the source of the gas is within ten miles of an incorporated town or industrial plant, the Wyoming statute is within the limits of classification permissible under the equal protection clause of the Fourteenth Amendment. Pp. 314, 324. *Bacon* v. *Walker*, 204 U. S. 311.
7. The validity of the regulation cannot depend upon the relative values or importance of the industries favorably and unfavorably affected by it, or their relations to the welfare of the State, these being matters for the judgment of the state legislature. P. 322.
8. The fact that plaintiffs' products—carbon black and gasoline—may be sold for more than the gas consumed in making them would bring for fuel purposes, is not a ground for denying the State the power to prevent the disproportionate use and rapid depletion of the natural gas supply involved in the process. *Id.*

Reversed.

THE case is stated in the opinion.

Mr. Henry E. Lutz, with whom *Mr. William L. Walls*, Attorney General of the State of Wyoming, was on the brief, for appellants:

Mr. John W. Lacey and *Mr. Reid L. Carr*, with whom *Mr. Herbert V. Lacey* was on the brief, for appellees:

It is noteworthy that appellants did not, by affidavit or otherwise, controvert any of the following matters: (1) That appellees had, prior to the enactment of the statute, made an investment in the business of manu-

facturing carbon black of nearly seven hundred thousand dollars; (2) that the factory of the appellees is most efficient and economical, and yields the largest amount of merchantable black that can be produced by any known method; (3) that the market price and value of the products, gasoline and carbon black, exceed the market price and value for any other purpose of the natural gas consumed to make them; (4) that carbon black made from natural gas is not only useful but indispensable for the manufacture of the printing inks required by the high-speed presses now in use, and its place can be supplied by no substitute; (5) that it is further a necessity for various manufactures of rubber, for carbon papers, typewriter ribbons, phonograph records and many manufactured articles of universal daily use; (6) that it is impossible so to use gas in manufacturing carbon black that the heat contained in the gas shall be "fully and actually used for other manufacturing purposes or domestic purposes;" (7) that the manufacturing operations of the appellees are so conducted as to cause no injury to the health, morals or comfort of anybody; (8) that the inevitable effect of the statute is not only to require the Midland Company to cease operating said factory, but to render it impossible to sell or use any gas derived from the wells of the Occidental Company for the manufacture of carbon black at any time or place; (9) nor is there the slightest attempt to prove that anyone of the "incorporated towns" or "industrial plants" owns any interest whatever in the gas wells or gas lands located within a radius of ten miles outside their boundaries. In other words, the showing is that the statute, instead of conserving gas for the reasonable use of all the collective owners of the lands under which it lies, seeks to appropriate the gas—or what appellants term a "paramount right" thereto—for the benefit of certain communities and industries in the vicinity of the gas wells, and to deprive the owners of these gas lands and wells of

the right to use or sell the gas they reduce to possession in the manner that will produce the best return to the owners and the greatest benefit to the public at large, viz, for the manufacture of carbon black.

In *Bacon* v. *Walker*, 204 U. S. 311, a statute was examined which limited the herding and grazing of sheep on the public domain within two miles of the dwellings of others than the sheep-owners. As will clearly appear from the case, and especially from the two Idaho cases cited in the opinion, one ground of sustaining the statute was that herding sheep close to the habitation of a settler is a nuisance. In *Sweet* v. *Ballentine*, 8 Idaho, 431 (cited in the opinion of this court) it was further emphasized that the plaintiff was not the owner of the lands affected and that "these statutes were not intended to prevent owners from grazing sheep upon their own lands, although situated within two miles of the dwelling of another."

Not one of the cases cited by appellants furnishes either authority or example upholding the right to take away property without price from any individual merely for the financial benefit of another person or any number of persons, although such seems to be the deduction made from those cases.

Not one gives countenance to the claim that natural gas, when reduced by the landowner to possession, is in any sense public property. Not one asserts the power of the legislature to deprive the owner of natural gas lands of the right to sell in the best market, or to put to a use beneficial and necessary to society, such gas as naturally arises in his wells, merely in order that he may thereby be compelled to keep his gas till certain neighboring towns or factories desire it. Each is within well-known principles governing the exercise of police power, and any general language used must be read in the light of the facts involved.

It does not follow that by calling the act a "conserva-

tion" measure, or by declaring the manufacture of carbon black from natural gas to be "wasteful" or "extravagant," the legislature has foreclosed judicial consideration of the subject. *Bunting* v. *Oregon*, 243 U. S. 426, 435; *Coppage* v. *Kansas*, 236 U. S. 1; *Passenger Cases*, 7 How. 283. The principles governing inquiry into the propriety of the purported exercise of police power were formulated long ago in *Lawton* v. *Steele*, 152 U. S. 133. In the recent case of *Mountain Timber Co.* v. *Washington*, 243 U. S. 219, this court indicated the tests.

The authorities quoted, as well as those cited below, fully establish not only that the true purpose and effect of the act as distinguished from its ostensible purpose, but also the reasonableness of the restrictions sought to be imposed, and the truth of the accusation of waste are all fully open to judicial review.

The business of manufacturing carbon black is a long-established, necessary and legitimate one, neither noisome nor a nuisance, nor a detriment to "public health, morals or safety." The statute does not attempt to prescribe any limitation as to the place where carbon-black factories shall be located or maintained; does not attempt to deal with the escape of natural gas into the air; does not seek to prescribe for all landowners alike a limit as to the measure or proportion of the productive capacity of each well that shall be withdrawn or marketed; does not regulate the right of proportionate acquisition, nor restrain any of the collective owners from appropriating an undue or excessive quantity through the use of pumps or other artificial means of accelerating the natural flow.

What it does is, after the natural gas has been reduced to possession and has thus become a commodity of commerce, to divest it of one of the attributes of property, namely the right of disposal for an essential commercial purpose. Concretely stated, it deprives the appellees altogether of the right to dispose of or use a single cubic foot of

gas from their lands for the operation of their factory. This it does by imposing conditions as to full utilization of heat which are impossible of fulfillment.

The prohibition is imposed not upon all landowners who derive their supply of gas from a common source or reservoir, but only upon those whose wells are located within ten miles of any incorporated town or industrial plant. Each incorporated town and each private industrial plant (except that of the appellees), is thus surrounded by a circle or prohibited zone, whose area is three hundred and fourteen square miles. Elsewhere the ban is inoperative. What is the object of the ten-mile limitation? Admittedly, to benefit certain manufacturers and private consumers, who are or may become purchasers of natural gas, by depriving the owners of the gas produced in certain large areas of the right of sale to certain other manufacturers.

Natural gas is not public property. *Ohio Oil Co.* v. *Indiana*, 177 U. S. 190, 209; *Oklahoma* v. *Kansas Natural Gas Co.*, 221 U. S. 229, 254; *Haskell* v. *Kansas Natural Gas Co.*, 224 U. S. 217. In the case at bar not only are the appellees among the common owners because owners of lands in which the gas is found, but they have also become the owners in possession of the gas itself as private property in the four wells here involved.

Like the Oklahoma statute, the Wyoming statute does exactly what the Indiana statute did not do, and omits precisely those things which were with such care included in the Indiana statute. The Wyoming statute entirely ignores the rights of the owners of the land in which the natural gas is found—the common owners of the gas. It makes no provision for their protection. It does not restrict the number of wells that may be drilled into the gas reservoirs, nor the amount of gas that may be withdrawn by one well or by any one owner, nor does it prohibit the discharge of the gas into the open air without making

any use of it. And there is uncontradicted evidence in the record that such waste within the true meaning of that word is taking place.

On the contrary, the sole purpose was to select the market, to preserve the gas, not for the owners but for third parties, that is to say, for private industries and private consumers in incorporated towns.

The intent of the statute was to take away certain rights to sell gas from the private owners of the gas and make a donation to that extent to certain towns and manufacturing establishments. The purpose is commercial—the business welfare of these towns and manufacturing plants, as coal might be, or timber. *Oklahoma* v. *Kansas Natural Gas Co.*, 221 U. S. 255.

The peculiar form of the statute renders it applicable to these appellees alone, while leaving the door open for others to engage in similar manufacturing pursuits elsewhere in Wyoming. The inference is clear that the spoliation of the appellees for the advantage of the residents and industrial plants of Lovell is the real object sought.

The statute thus takes private property for private use under pretext of the public good. These purposes are not even public purposes such as would authorize the exercise of eminent domain to take the property of the appellees in their gas, nor yet public in such sense as would authorize any taxes therefor to be levied upon the property here involved even if it were located in one of the towns receiving the indirect benefits. *Cole* v. *La Grange*, 113 U. S. 1, 6; *Missouri Pacific Ry. Co.* v. *Nebraska*, 164 U. S. 403; *Missouri Pacific Ry. Co.* v. *Nebraska*, 217 U. S. 196; *Michigan Sugar Co.* v. *Dix*, 124 Michigan, 674; *Dodge* v. *Mission Township*, 107 Fed. Rep. 827; *Oxnard Best Sugar Co.* v. *Nebraska*, 73 Nebraska, 57; Const., Wyoming, Art. I, §§ 32, 33.

The statute here in controversy takes property, since it forbids sale and use, although such sale and use in no way

create or contribute to any nuisance or injury to the health, morals or comfort of anyone. And the sale and use prohibited, under the evidence, is without question the most profitable sale and use that can be made of the gas, and the one most beneficial to the world and to civilization. 2 Kent's Com. 320; *Litchfield* v. *Bond*, 186 N. Y. 66, 80; *Buchanan* v. *Warley*, 245 U. S. 60, 74; *In re Kelso*, 147 California, 609.

The statute "does not alone regulate the right of the reduction to possession of the gas, but when the right is exercised, when the gas becomes property, takes from it the attributes of property, the right to dispose of it." *Oklahoma* v. *Kansas Natural Gas Co.*, 221 U. S. 229, 254. So, too, the deprivation of the right to use the factory, or the imposition of restraints rendering such use impossible, is a taking of property in as real a sense as if the factory were physically appropriated. *Dobbins* v. *Los Angeles*, 195 U. S. 223; *In re Smith*, 143 California, 368. See also: *Forster* v. *Scott*, 136 N. Y. 577; *People* v. *Otis*, 90 N. Y. 48; *Pumpelly* v. *Green Bay Co.*, 13 Wall. 166; *Kansas City Gas Co.* v. *Kansas City*, 198 Fed. Rep. 500.

Oil is also a fuel, produced and transported under conditions substantially similar to natural gas. It is also an essential ingredient in printing inks, into the composition of which eight times as much oil as gas-black enters. The heating value of oil so used is totally lost. Would it be a reasonable exercise of police power to declare that oil—or oil from certain wells—must not be sold for such use unless the heat contained in the oil be fully used for domestic or manufacturing purposes?

Wood is a fuel—the oldest and most widely used of fuels. From wood is made news-print paper. Again the heat, or fuel value, is lost. Could it be deemed a reasonable exercise of police power to forbid the sale of wood to pulp mills unless the heat contained therein be fully employed for other uses?

In each instance a fuel is consumed. Its heating value is lost. A product of great pecuniary and cultural value results. The manufacture of the product would be impossible except at the sacrifice of the heat. A requirement that it shall be preserved is unreasonable and destructive.

Manifestly the contour and extent of the field or reservoir constituting the common source of supply are determined by geological conditions, bearing no reference to the boundaries of incorporated political subdivisions or to the location of industrial plants. If the fugitive character of natural gas, and the "co-equal right of all landowners to draw from a common source of supply" is, as stated in *Ohio Oil Co.* v. *Indiana*, 177 U. S. 190, 203, the very basis of the power of the legislature to restrain waste, then argument certainly cannot be needed to show that it may not lawfully require some to desist from such "waste" while permitting the same "waste" to others. The two propositions are mutually destructive.

Still more glaringly is it violated if permission to "waste" or "wastefully use" from the common store is denied to some and granted to others. Yet this is the precise construction of the law adopted and upheld by the state officials.

As construed by the state courts, the act involved in *Lindsley* v. *Natural Carbonic Gas Co.*, 220 U. S. 61, prohibited only the use of pumps or artificial contrivances to accelerate the natural flow of percolating water, with the object, not to use the water in connection with the enjoyment of the land, but to extract and vend the gas as merchandise, allowing the water to run to waste. So construed, it was sustained by this court (p. 77).

Even if the analogy between water and natural gas were complete, the present law is wholly dissimilar.

Further as to arbitrary discrimination, see: *Connolly* v. *Union Sewer Pipe Co.*, 184 U. S. 540; *International Har-*

vester Co. v. *Missouri*, 234 U. S. 199, 215; *Gulf, Colorado & Santa Fe Ry. Co.* v. *Ellis*, 165 U. S. 150; *Cotting* v. *Kansas City Stock Yards Co.*, 183 U. S. 79; *McFarland* v. *American Sugar Refining Co.*, 241 U. S. 79; *s. c.*, 229 Fed. Rep. 284; *Smith* v. *Texas*, 233 U. S. 630.

MR. JUSTICE MCKENNA delivered the opinion of the court.

The complainants are corporations of Delaware and have their places of business in that State.

The defendants are officers of Wyoming, being respectively, its Attorney General, Prosecuting Officer of Big Horn County, and the Governor of the State.

It is alleged that jurisdiction of the District Court depends upon diversity of citizenship, and the Constitution of the United States, the Constitution being violated by an act of the legislature of the State. Chapter 125 of the Session Laws of 1919.

The object of the suit is to restrain defendants, and each of them, from enforcing or attempting to enforce the legislation.

It is declared by the act, which is attacked, that its purpose is "the protection and conservation of the supply of natural gas." The first section is as follows:

"The use, consumption or burning of natural gas taken or drawn from any natural gas well or wells, or borings from which natural gas is produced for the products where such natural gas is burned, consumed or otherwise wasted without the heat therein contained being fully and actually applied and utilized for other manufacturing purposes or domestic purposes is hereby declared to be a wasteful and extravagant use of natural gas and shall be unlawful when such gas well or source of supply is located within ten miles of any incorporated town or industrial plant."

Section 2 prohibits the use, sale or other distribution of

natural gas, the product of any well owned, leased or managed by any person, for the purpose of manufacturing or producing carbon or other resultant products from the burning or consumption of such gas, without the heat therein being fully and actually utilized for other manufacturing purposes or domestic purposes. Violations are made misdemeanors.

The grounds of contention against the act are set forth in very voluminous pleadings, supplemented by a number of affidavits. But only a brief summary of them is necessary to present the question involved, which is, stated broadly, that the act transcends the police power of the State, its purpose and effect being not to regulate and conserve natural gas, but to prohibit its use, and make a discrimination between owners having equal rights, and thereby violates Article I, § 10, of the Constitution and the Fourteenth Amendment thereof.

Prior to the enactment of the statute, the Midland Company had erected a factory for the manufacture of carbon black, which factory is located about 1½ miles from the town of Cowley, Big Horn County, at an expenditure of $375,000. It is equipped for the manufacture of such carbon black, and can be used for no other purpose, and there is produced from it approximately 13,000 pounds of that article daily, which is sufficient for the manufacture of 117,000 pounds of printing ink. From the gas consumed to make the carbon black, there is first extracted approximately 1600 gallons per day of high-gravity gasoline.

The uses of carbon black are enumerated, and it is alleged that no form of it possessing the same properties and the wide variety of uses can be commercially manufactured from any material or substance other than natural gas.

The origin of the industry and the uses of its product are variously detailed, and it is alleged that the company's

factory is so conducted as to permit no waste, that the best known processes and appliances are employed, and that the operation of the gasoline absorption plant and the recovery of gasoline from the gas supplied by the wells would be impossible if the carbon plant should cease to be operated, for the reason that the gas cannot be sold to other users in that locality in sufficient quantities to render the extraction of gasoline therefrom commercially profitable.

The Occidental Oil and Gas Company owns the land upon which are located the gas wells constituting the principal source of supply to the plant and carbon factory of the Midland Company. The Occidental Oil and Gas Company also constructed, owns and operates the pipe line by which the gas is conveyed to the factory, and delivers it to the factory, receiving from the Eastern Fuel Company, which owns and operates the gasoline extraction plant, a royalty of one-half of the gasoline extracted therefrom. The Oil Company also owns mineral leases covering 1200 acres of proved gas territory within ten miles of Cowley. Its business is an integral and inseparable part of that of the Midland Carbon Company, and all of its investments have been made in view of the carbon business.

In the construction of its pipe line it expended $65,000, and in the purchase of lands upon which the wells are located, a sum exceeding $30,000. Other gas lands are alleged to have been purchased and leased prior to the enactment of the law.

There are other allegations asserting the use of the gas and its products, and that such use is not a waste of the gas. Various ways in which the law violates complainants' rights under the Constitution of the United States are detailed: that under the guise of regulation the restrictions of the act are so framed as to abolish, ruin and destroy complainants' business, while leaving it open to others to engage in carbon manufacture, without saving the gaso-

line; that the penalties imposed by the act are harsh, unreasonable and confiscatory, and that a dispute of its legality would impose a penalty of $1,000 for each separate daily violation of it. Other injuries are alleged.

As already said, affidavits made by representatives of various trades and industries, displaying the qualities of carbon black and its uses, are attached to the bill. Other affidavits express the detriment, in the opinion of the affiants, of any restriction or regulation of the production of it. And others, from asserted experts, exhibit the source of the gas and the process of manufacture from it of carbon black, and that, in its manufacture, heat is necessarily evolved, but that as soon as any attempt is made to transform the heat into any other form of energy, such as light or mechanical power, an enormous but inevitable loss of heat results.

An injunction is prayed, interlocutory and permanent, restraining defendants from enforcing the act.

Upon the bill, (it is verified) exhibits and affidavits, it was ordered that the application for interlocutory injunction be heard by three judges and that in the meanwhile a temporary restraining order be granted upon filing a bond in the sum of $1,000.

The answer in its admissions, denials, and independent averments, asserts waste of the gas by complainants' gas factory and processes, the depletion of the wells and their product, from which it is estimated that within three years all of the wells will have been utterly and completely depleted, and the depletion will relate not only to the wells furnishing gas for the manufacture of carbon black, but will likewise relate to the entire region and vicinity.

And it is alleged that by preventing the use of the gas for the manufacture of carbon black, the towns of Lovell and Cowley and all industrial plants therein will be afforded a supply of gas for all domestic and industrial purposes for a period of thirty years.

The vice attributed to the act by complainants is denied, and a benefit and virtue asserted for it.

It is prayed that the bill be dismissed, and the restraining order be dissolved. The answer is verified.

A motion to dissolve the temporary restraining order was made which was supported by affidavits and opposed by others.

The affidavits are too long to quote. Those on the part of defendants represent the interest of the city of Lovell and other towns, and the necessity to their industries, if there are to be any, of the natural gas from the wells with which this case is concerned, and represent a depletion of the gas supply by the use made of the gas by complainants. Figures are given. Particulars are stated in one affidavit, and for a review of what are deemed the important tests and elements of judgment of the conditions which existed and would succeed the present practice, it is said:

"In conclusion, assuming that the present consumption of gas from this sand is 15,000,000 cubic feet per day (as I have been reliably informed) and that the decrease in pressure for the last year has been 150 pounds, and knowing that the present pressure is approximately 200 pounds, it is a simple problem in mathematics to ascertain the future life of the field. In other words, at the present rate of decrease in pressure, the field will be exhausted in sixteen months and there will be no pressure to force the gas out of the sand. On the same basis of reasoning there are approximately 7,200,000,000 cubic feet left in the sand and the present consumption is five and a half billion cubic feet per year."

The court sustained the application for temporary injunction.

The question in the case is, as we have said, whether the legislation of Wyoming is a valid exercise of the police power of the State, and brings into comparison the limits of the power as against the asserted rights of property,

—whether the legislation is a legal conservation of the natural resources of the State, or an arbitrary interference with private rights. Contentions of this kind have been before this court in other cases and their discussions and decisions have materiality here. We mean, not discussions or decisions on the police power in the abstract or generality, but discussions and decisions involving conditions and principles pertinent to the present case.

It will be observed that the act under review does not prohibit the use of natural gas absolutely. It prohibits, or, to use its words, declares it to be a "wasteful and extravagant use of natural gas," when it is burned or consumed "without the heat therein contained being fully and actually applied and utilized for other manufacturing purposes or domestic purposes." But not even that unlimitedly, but only when the "gas well or source of supply is located within ten miles of any incorporated town or industrial plant." Such is the prohibition upon the user or consumer. There is a prohibition upon the owner or lessee of wells within the designated distance from a town or industrial plant to sell or dispose of the gas except under the specified conditions "for the purpose of manufacturing or producing carbon or other resultant products."

There are two elements, therefore, to be considered: (1) The distance of the wells from an incorporated town or industrial plant; (2) the elment of heat utilization for manufacturing or domestic purposes. These elements are the determining ones in the accusations against the law. The first is the basis of the discrimination charged against it; the second is the basis of the charge that the law deprives the companies of their property by the ruin of their business and capital investments, and impairs the obligations of preëxisting contracts.

In *Bacon* v. *Walker*, 204 U. S. 311, a statute of Idaho was considered which made it unlawful, with consequent liability to damages, "for any person owning or having

charge of [the] sheep to herd the same, or permit them to be herded on the land or possessory claims of other persons, or to herd the same or permit them to graze within two miles of the dwelling house of the owner or owners of said possessory claim." The statute was sustained as a lawful exercise of the police power of the State against the assertion of the right of one citizen to use the public domain as much as another citizen, and that to impose damages upon him for the exercise of the right deprived him of his property without due process of law, and, besides, arbitrarily discriminated between sheep grazing and the grazing of other kinds of stock. We there said in substance that, the power of regulation existing, the imposition of some limit to a right, when its exercise would impinge upon the equal right of another, was the exercise of legislative power and that the circumstances which induced it could not be pronounced illegal "on surmise or on the barren letter of the statute." And we said further, that where equal rights existed the State has an interest in their accommodation. Pertinent cases were cited, and the exclusion from grazing within two miles of the possessory claim of another was decided to be legal, that "the selection of some limit is a legislative power," and that it was "only against the abuse of the power, if at all, that the courts may interpose." The mere distance expressed nothing.

The case, and those it cites, are authority for the position that a State may consider the relation of rights and accommodate their coexistence, and, in the interest of the community, limit one that others may be enjoyed. Of this *Ohio Oil Co. v. Indiana*, 177 U. S. 190, is especially illustrative and pertinent and conducts naturally to the consideration of the second proposition, that is, to the element of heat utilization.

The suit was by the State and was based upon a statute which was directed against and prohibited one having

possession or control of any natural gas or oil well to permit the flow of gas or oil from any such well to escape into the open air for a longer period than two days after the gas or oil had been struck. From the standpoint of the law, to do so was a waste of gas. A right against the statute was set up, based upon the asserted or implied postulate that the owner of the land owned all beneath the surface and all that could be brought to the surface within the lines of the land. The postulate was rejected upon the ground of the nature of the gas, the capability of its flow from place to place, the common right to domestic and industrial use of it, and the power of the State to regulate and conserve such right.

The Oil Company contended as owner of the land (it was the lessee) and producer of the oil, that it had expended many thousands of dollars in purchasing and equipping machinery for the sole purpose of raising and producing oil, it not being engaged in producing or transporting natural gas, and that it used the gas as "power, force and agency" to raise the oil to the surface of the ground, and that such was "the usual, natural and ordinary method of raising and saving oil in such cases." And further, that no machinery or process of any kind had been devised by which the oil could be produced and saved otherwise, and by forbidding it, the company's business would be destroyed and the State deprived of the use and profits of the oil which was of vastly more value than the gas. And it was asserted that no more gas was permitted to escape than was consistent with the due operation of the well with the highest skill. It was hence urged against the act that it deprived of property without due process of law and denied to the Oil Company the equal protection of the laws. The answer was adjudged by the Supreme Court of the State not to constitute a defense. The adjudication was sustained by this court. We said, citing a case, "possession of the land is not necessarily possession

of the gas," and again, on the authority of cases, "that the property of the owner of lands in oil and gas is not absolute until it is actually in his grasp, and brought to the surface." It was decided, however, that before that event occurs, indeed in prevention of it, the State may interpose its power to prevent a waste or disproportionate use of either oil or gas by a particular owner in order to conserve the equal right of other owners and advance the public interest. And in support of this power of regulation a similarity between natural gas and other sub-surface minerals was rejected. "True it is," it was said, "oil and gas, like other minerals, are situated beneath the surface of the earth, but except for this one point of similarity, in many other respects they greatly differ. They have no fixed *situs* under a particular portion of the earth's surface within the area where they obtain. They have the power, as it were, of self-transmission." Necessarily, therefore, it was adjudged that their use by one owner of the surface affected the use of other owners, and an excessive use by one diminished the use by others, and a similarity of other minerals, as we have seen, was rejected, and the analogy between oil and gas and animals *feræ naturæ* was declared. It was hence decided that the power of the State "can be manifested for the purpose of protecting all the collective owners, by securing a just distribution, to arise from the enjoyment by them, of their privilege to reduce to possession, and to reach the like end by preventing waste."

To the contention that oil could not be taken at a profit by one who made no use of the gas, it was replied that such fact went "not to the power to make the regulations, but to their wisdom." And this can be said of the contention, in the case at bar, that one element is more valuable than another, that carbon black is more valuable than the gas from which it is extracted.

It will be observed that the basic principle of the Indiana statute is the same as the basic principle of the

Wyoming statute, that is, the power of regulation dependent upon the natures of oil and gas, and that the absolute dominion of the surface of the land is not an unlimited dominion over them.

The case was cited in *Lindsley* v. *Natural Carbonic Gas Co.*, 220 U. S. 61, to defeat a suit brought to restrain the officers of the State of New York from enforcing against the gas company a statute which made it unlawful to pump from wells or otherwise draw by artificial appliances that class of mineral waters holding in solution carbonic acid gas, or producing an unnatural flow of such gas "for the purpose of extracting, collecting, compressing, liquifying or vending such gas as a commodity otherwise than in connection with the mineral water and the other mineral ingredients with which it was associated."

The company alleged that the gas could be lifted to the surface only by means of pumps or other artificial appliances and that many other landowners in Saratoga Springs had like wells which were operated in a like way with a like purpose. The utility of the gas was alleged and a property right asserted which the statute, it was further alleged, deprived of in violation of the Constitution of the United States.

A demurrer was sustained to the bill; therefore its averments were admitted. The basis of the contention of the offense of the statute against the Constitution of the United States explicitly was, that the company, being the owner of the land owned, had power and authority over all beneath the land's surface that it could reduce to possession. This was the same postulate, it will be observed, that was asserted in *Ohio Oil Co.* v. *Indiana*. It was rejected upon the authority of that case. We, however, said, "were the question an open one we still should solve it in the same way."

May the principle and its justification be extended to the Wyoming statute? The statute of Wyoming (we

repeat it to have it immediately before our eyes) declares it to be a "wasteful and extravagant use of natural gas" to use, consume or burn it when taken or drawn from any gas well or wells or borings "for the products where such natural gas is burned, consumed or otherwise wasted without the heat therein contained being fully and actually applied and utilized for other manufacturing purposes or domestic purposes." The declaration of illegality, however, only applies when the "gas well or source of supply is located within ten miles of any incorporated town or industrial plant." Section 2 explicitly mentions carbon black as within the illegality of the law, and as this case concerns its production we may accept its production as a test of the companies' case.

Of the range of the utility of carbon black there can be no controversy and to this fact the companies give an especial emphasis in their averments, supplementary affidavits, and argument. The fact, however, is but of incidental importance. The determining consideration is the power of the State over, and its regulation of a property in which others besides the companies may have rights and in which the State has an interest to adjust and preserve, natural gas being one of the resources of the State. And in this consideration it is more important to consider not for what a particular owner uses the gas, but the proportion of his use to that of others, or it may be, the prevention of use by others; and the striking fact is presented by the companies' averments that by the processes and devices employed by them there is only obtained from each thousand cubic feet of natural gas consumed 1¾ pounds of carbon black and 2/10 of a gallon of high-gravity gasoline. To this averment the defendants add that every thousand cubic feet of gas contains from 33 to 40 pounds of carbon and therefore, "that the inefficiency of the process used by complainants is very high, ranging only from 2.8% to 4.6%." It is the further aver-

tion of defendants that the companies are utilizing and withdrawing from the earth gas at the rate of approximately 10,000,000 cubic feet per day and that the same can never be replaced or restored.

To these averments we may add the affidavits. There is something in them but not enough to reduce the importance of the facts averred. Those on the part of the companies are directed to a great extent to the value of carbon black and its use and the detriment or disaster of the discontinuance or even reduction of its manufacture. And the explicit assertion is that it is absolutely impossible to utilize the heat generated as an incident to its manufacture. A comparison is made with other fuels and the affidavits are explicit in statement that the requirement that the heat contained in them must be "fully and actually applied and utilized" (to use the words of the Wyoming statute) is not only unreasonable but impossible. Figures are given not only of gas engines but of oil, air and steam engines. This is dwelt on at great length and it is declared that it is absolutely impossible to utilize heat generated as an incident to the manufacture of carbon black. And it is said, "If the true test of the waste of gas or any other fuel is whether or not the heat therein contained is fully utilized, it would follow that practically every industrial use of fuel must be characterized as wasteful."

There is also testimony from those familiar with the geological formations, and the production of natural gas in Wyoming, that there are very extensive deposits underlying ten counties, and that their development has scarcely more than commenced and that their potential capacity far exceeds the capacity of the wells now drilled. Further, that the aggregate capacity of the existing wells exceeds 650,000,000 cubic feet per day, and that this production could be largely augmented if the demands for natural gas in the State warranted.

Opposing affidavits set forth the needs of the towns, present and prospective, and of industries other than carbon black, and that the wells of the companies are drilled into the same sand in which the wells of the Lovell Gas and Electric Company, an industry which furnishes gas and electricity to the town of Lovell, are drilled. The sand is a free flowing sand, that is, one in which the gas has free access from one part of the field to the other, consequently the gas pressure would be approximately the same at all the wells drilled into it. With the operation of the wells of the companies came a diminution of pressure, and "if the present consumption of gas continues for another year, there will not be sufficient gas in this field in the particular sand in question, to supply even the domestic uses of the town of Lovell."

And it is affirmed that the plant of the Midland Gas Company consists of about ninety separate buildings constructed of sheet iron and steel, in such a way that they can be moved more readily than almost any other character of construction and were evidently designed with the idea of portability in mind, and at the present rate of consumption of the gas, they will have to be moved, in any event, within a year. Corroborating figures of the supply and consumption are given, and it is said that if the wells now driven be allowed to flow at their full capacity they will be entirely exhausted in ninety days. The proof of this is said to be that the use of 15,000,000 cubic feet per day of gas produced within the last eighteen months has caused a loss of 57% of the available gas in the producing sand. In contrast, it is estimated, that if the gas consumed at the carbon plant was conserved the supply available for domestic and industrial use in the towns of Lovell and Cowley would last for a period of ten years.

There is speculation as to other basins of deposits of gas and its utility for industries, but which cannot be undertaken against the depletion by the production of carbon

black. The process to make the latter is said to be simple and is similar to holding a cold plate over an old-fashioned gas jet. In fact, it is said, the process used by the Midland Carbon Company is merely an incomplete combustion of gases in an insufficient amount of air, the flames from the different jets practically touching cast iron channel plates, which are suspended over the flames and are moved backward and forward at a very slow rate of speed. The carbon is scraped off the plates into hoppers and carried to the packing houses by conveyors. All of this is mechanical.

It is testified (by an engineer of the Bureau of Mines in the Interior Department who had made a study of the making of carbon black) that the efficiency of the carbon black industry is very low; that the largest yield of which affiant had any knowledge did not exceed 1½ pounds per 1000 cubic feet of natural gas though it is a well known and chemically ascertained fact that one thousand cubic feet of natural gas contains approximately from 33 to 45 pounds of carbon.

The companies replied with affidavits of opposing tendency and made comparisons of the money value of carbon black with the money value of natural gas, the former being the more valuable. And there is contradiction of the asserted lower pressure of the wells and the tendency to the depletion of the gas, and assertion that other forms of industry can well use coal for fuel.

The affidavits (which we have presented necessarily in barest outline) whether they may be regarded as presenting issues of fact or of judgment, exhibit the conditions which may have moved the policy and legislation of the State. Manifestly, conceding a power to the State of regulation, a comparison of the value of the industries and a judgment upon them as affecting the State, was for it to make. Such comparison may, therefore, be put aside. It may be, as it is deposed, that 1000 cubic feet of natural gas converted into gasoline and carbon black may

be sold much higher than can be obtained from the same amount of gas sold for fuel purposes, but it does not follow from that fact that the State may not consider, and direct its legislation by the consideration that (and we take the averment of the companies) 1000 cubic feet of natural gas is consumed to produce 1¾ pounds of carbon black and about 2/10 of a gallon of gasoline. That it may so consider depends upon the question whether its statute is within the principle of the statutes passed on in *Ohio Oil Co.* v. *Indiana*, and *Lindsley* v. *Natural Carbonic Gas Co.* By reverting to these cases it will be immediately observed that the power of regulation over natural gas is possessed by a State; and in the first case, (*Ohio Oil Co.* v. *Indiana*), it was exercised to prohibit the employment of the gas as a means or agency in the production of oil, against an asserted right of property in the ownership of the land upon which the oil was produced, and, therefore, of the oil and gas as incidents of such ownership, which could be used in such manner and quantity as the landowner might choose.

In the *Lindsley Case* the power of the State was exerted to prohibit the owner of the surface from pumping on his own land, water charged with gas. This was but an exertion, it was said, to preserve from depletion the subterranean supply common to him and other owners, and that the statute, therefore, was not unconstitutional as depriving owners of their property without due process of law. *Ohio Oil Co.* v. *Indiana*, as we have pointed out, was cited as a precedent and its principle applied. The case at bar is, we think, within that principle, in other words, the power is exerted to prohibit an extravagant or wasteful or disproportionate use of the natural gas of the State.

We have seen that the method of production by natural gas is like holding a cold plate over a candle, or, as it is expressed by a witness, it can only be produced "by combustion and the impinging of the flame on the metallic sur-

face." And there is great disproportion between the gas and the product, and necessarily there was presented to the judgment and policy of the State a comparison of utilities which involved, as well, the preservation of the natural resources of the State, and the equal participation in them by the people of the State. And the duration of this utility was for the consideration of the State, and we do not think that the State was required by the Constitution of the United States to stand idly by while these resources were disproportionately used, or used in such way that tended to their depletion, having no power of interference.

The cited cases determine otherwise, and that, as the State of Indiana could prevent the exhaustive use of gas in the production of oil, and as the State of New York could prevent the owner of land from using artificial means to obtain the carbonated waters under his land, the State of Wyoming has the same power to prevent the use of natural gas in the production of carbon black, the tendency of which is (it may be the inevitable effect of which is) the exhaustion of the supply of natural gas and the consequent detriment of other uses.

It may be said, however, indeed is said, that the purpose of the act or its effect is a discrimination between producers of carbon black, those ten miles from a town or industrial plant not being within its provisions. We think the classification is justified by the case of *Bacon* v. *Walker*, *supra*, and indeed, by the principles which determine classification.

To the contention that the statute is not one of conservation because carbon black factories are permitted if ten miles distant from a town or industrial plant, the immediate answer is that it is for the State to determine not only if any conservation be necessary but the degree of it, and certainly the companies cannot complain if the State has not exerted its full power.

As we have seen, many affidavits were addressed to the

impossibility of complying with the statute, that is, of utilizing the heat of natural gas to the extent of the words of the statute. We say to the extent of the words of the statute because we think the statute must be construed with reference to the facts of nature and their possibilities, and that all that was intended by the words employed was to require a practical and possible use of the heat, as in other fuels and by the existing instrumentalities, and if this should be done it was a legal use of the gas—was an application and utilization of the heat contained in it. The statute was only intended to prevent the selection of a product whose production tended, and according to some of the affidavits, whose inevitable effect was, to exhaust the supply of gas in a very little while.

The decree granting the interlocutory injunction is reversed, and the case remanded to the District Court for further proceedings in conformity to this opinion.

Reversed.

THE CHIEF JUSTICE, MR. JUSTICE VAN DEVANTER and MR. JUSTICE MCREYNOLDS, dissent.